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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/456,371	12/08/1999	HEINRICH BOLLMANN	12010	6395

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EXAMINER	
ROCHE, LEANNA M	
ART UNIT	**PAPER NUMBER**
1771	14

DATE MAILED: 08/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/456,371	Applicant(s) BOLLMANN ET AL.	
	Examiner Leanna Roche	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,9,14,19,20,22-24 and 27-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,9,14,19,20,22-24 and 27-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. The request filed on May 23, 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/456371 is acceptable and a CPA has been established. An action on the CPA follows.

Claims 1, 9, 14, 19, 20, 22-24 and 27-29 are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 9, 14, 19, 20, 22-24 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeitler et al. (USPN 5288549) in view of Krech et al. (USPN 6063824) and Uchida et al. (USPN 5061778).

Zeitler is directed to a composite element which may be used to form dashboards in the automotive industry. The composite element of Zeitler comprises a top layer A and a base layer B. The base layer B of Zeitler may be comprised of a thermoplastic polyurethane elastomer having a thickness of from 2 to 8 mm and a ratio of isocyanate groups to isocyanate reactive groups in a range from 0.85:1 to 1.1:1. This reads on Applicant's claimed thermoplastic polyurethane molding.

The top layer A of Zeitler may be comprised of an elastic, cellular polyurethane having a density from 200-1000 kg/m^3 and high tear strength. However, Zeitler does not specifically disclose the use of a **micro**cellular elastic polyurethane. Krech teaches a microcellular polyurethane elastomer useful as a constituent in vibration and shock-damping systems in the automobile sector, which displays improved damping properties and excellent volume compressibility. The examiner takes Official Notice that it is known in the automotive industry that dashboards are made of noise and vibration damping materials (see USPN 5061778, Column 1, lines 29-42). Therefore, because Zeitler is directed to the production of dashboards, it would have been obvious to the skilled artisan at the time this invention was made to use a microcellular elastic polyurethane material, as disclosed by Krech, as the top layer A in the composite element of Zeitler, motivated by the desire to make a dashboard with improved damping properties and excellent volume compressibility.

Zeitler also does not specifically disclose the tensile strength, elongation at break, tear propagation resistance and rebound resilience values for top layer A. Krech teaches a microcellular polyurethane elastomer with a density, tensile strength, elongation at break and tear propagation resistance within Applicant's claimed ranges which is useful as a constituent in a vibration and shock-damping system in the automobile sector, and which displays improved damping properties and excellent volume compressibility. The examiner takes Official Notice that it is known in the automobile industry that dashboards are made of noise and vibration damping materials (see USPN 5061778, Column 1, lines 29-42). Therefore, because Zeitler is directed to

the production of dashboards, it would have been obvious to the skilled artisan at the time this invention was made to use a microcellular elastic polyurethane material, as disclosed by Krech, as the top layer A in the composite element of Zeitler, motivated by the desire to make a dashboard with improved damping properties and excellent volume compressibility.

With regard to Claim 9, the examiner takes Official Notice that it is known in the automobile industry that dashboards are comprised of noise and vibration damping materials (see USPN 5061778, Column 1, lines 29-42). Therefore, because Zeitler is directed to the manufacture of automotive dashboards comprised of the composite element of Zeitler, the composite element of Zeitler would have obviously been a damping element.

With regard to Claim 14, Zeitler does not disclose using their composite element for making the specific types of damping elements claimed by Applicant. However, at present, there are no structural limitations associated with the specific types of damping elements claimed by Applicant aside from the fact that the damping elements must be comprised of the claimed composite element. Without any additional structural difference, the intended use of the invention is not sufficient to show a difference between the claimed invention and the prior art. Because Zeitler in view of Krech teaches the claimed composite element and teaches articles comprised of the claimed composite element, Zeitler reads on Applicant's specific damping elements.

With regard to claims 22 and 23, because Applicant's claimed composite element is comprised of two layers, determination of the inner surface versus the outer surface

of the molding layer requires an understanding of the ultimate orientation of the composite element. Otherwise, the terms "inner surface" and "outer surface" are interchangeable. Therefore, because Zeitler in view of Krech discloses a thermoplastic polyurethane layer bonded to an elastic cellular polyurethane layer, Zeitler in view of Krech inherently reads on both an elastomer layer bonded to an inner surface of a molding or an elastomer layer bonded to an outer surface of a molding.

With regard to Claims 24 and 29, neither Zeitler nor Krech specifically disclose chemical bonds between the isocyanate groups in the thermoplastic polyurethane layer and the isocyanate-reactive groups in the microcellular polyurethane elastomers. However, because Zeitler discloses a thermoplastic polyurethane base layer bonded to a cellular polyurethane elastomer, and there is no indication of any adhesive layer between the cellular polyurethane elastomer layer and the thermoplastic polyurethane base layer, chemical bonding must occur between the two layers. Therefore, it is believed by the examiner that the composite element of Zeitler in view of Krech inherently possesses bonds between the isocyanate groups in the thermoplastic polyurethane layer and the isocyanate-reactive groups in the microcellular polyurethane elastomers as claimed by Applicant. See *In re Best,* 195 USPQ 433 footnote 4 (CCPA 1977).

With regard to Claims 27 and 28, Zeitler teaches an elastic top layer and a rigid base layer. This reads on a flexible element comprised of an elastomer and a rigid element comprised of thermoplastic polyurethane. Additionally, the composite element of Zeitler consists essentially of polyurethane.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 9, 14, 19, 20, 22-24 and 27-29 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leanna Roche whose telephone number is 703-308-6549. The examiner can normally be reached on Monday through Friday from 8:30 am to 6:00 pm (with alternate Mondays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Leanna Roche

lmr
August 8, 2002

TERREL MORRIS
SUPERVISORY PATENT EXAMINER
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